

Amendments to the Claims:

1. (Previously presented) A method of inducing a dopaminergic neuronal fate in a neural stem cell or neural progenitor cell, the method comprising: expressing Nurr1 above basal levels within the cell, co-culturing the cell with a Type 1 astrocyte of the ventral mesencephalon, and thereby contacting the cell in vitro with one or more factors secreted from said Type 1 astrocyte of the ventral mesencephalon, whereby dopaminergic neurons are produced.
2. (Previously presented) A method according to claim 1 comprising contacting the cell with fibroblast growth factor 8 (FGF8).
3. (Original) A method according to claim 1 comprising transforming a neural stem cell or neural progenitor cell with Nurr1.
4. (Canceled)
5. (Previously presented) A method according to claim 1 wherein the Type 1 astrocyte is immortalized or is of an astrocyte cell line.
6. (Previously presented) A method according to claim 1 wherein said cell is mitotic when it is contacted with said one or more factors.
7. (Previously presented) A method according to claim 1 wherein said cell is additionally contacted with one or more agents selected from the group consisting of: basic fibroblast growth factor (bFGF) epidermal growth factor (EGF), an activator of the retinoid X receptor (RXR), and 9-cis retinol.
8. (Previously presented) A method according to claim 1 wherein said cell is additionally contacted with a member of the fibroblast growth factor (FGF) family of growth factors.
9. (Original) A method according to claim 8 wherein

- said cell is contacted with bFGF or EGF, and SR11237.
10. (Previously presented) A method according to claim 1 wherein the neural stem cell or neural progenitor cell is pretreated with bFGF and/or EGF prior to contacting the cell with one or more factors secreted from a Type 1 astrocyte of the ventral mesencephalon.
 11. (Previously presented) A method according to claim 1 further comprising formulating a dopaminergic neuron produced by the method into a composition comprising one or more additional components.
 12. (Original) A method according to claim 11 wherein the composition comprises a pharmaceutically acceptable excipient.
 - 13.-69. (Canceled)